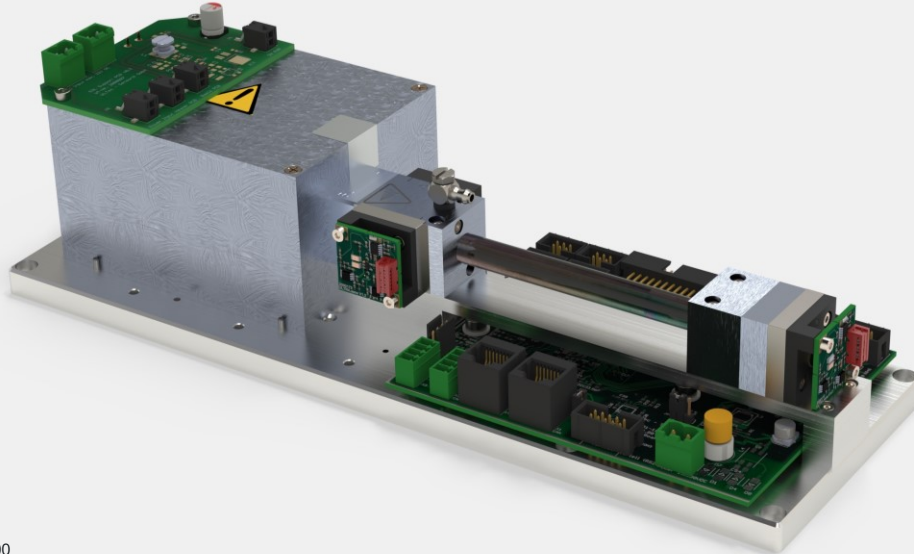


H₂S



ULTRA.sens[®] H₂S-AK100

Applications

- > Biogas monitoring
- > Industrial gas analyzer
- > Environmental monitoring
- > Process control
- > Leakage detection

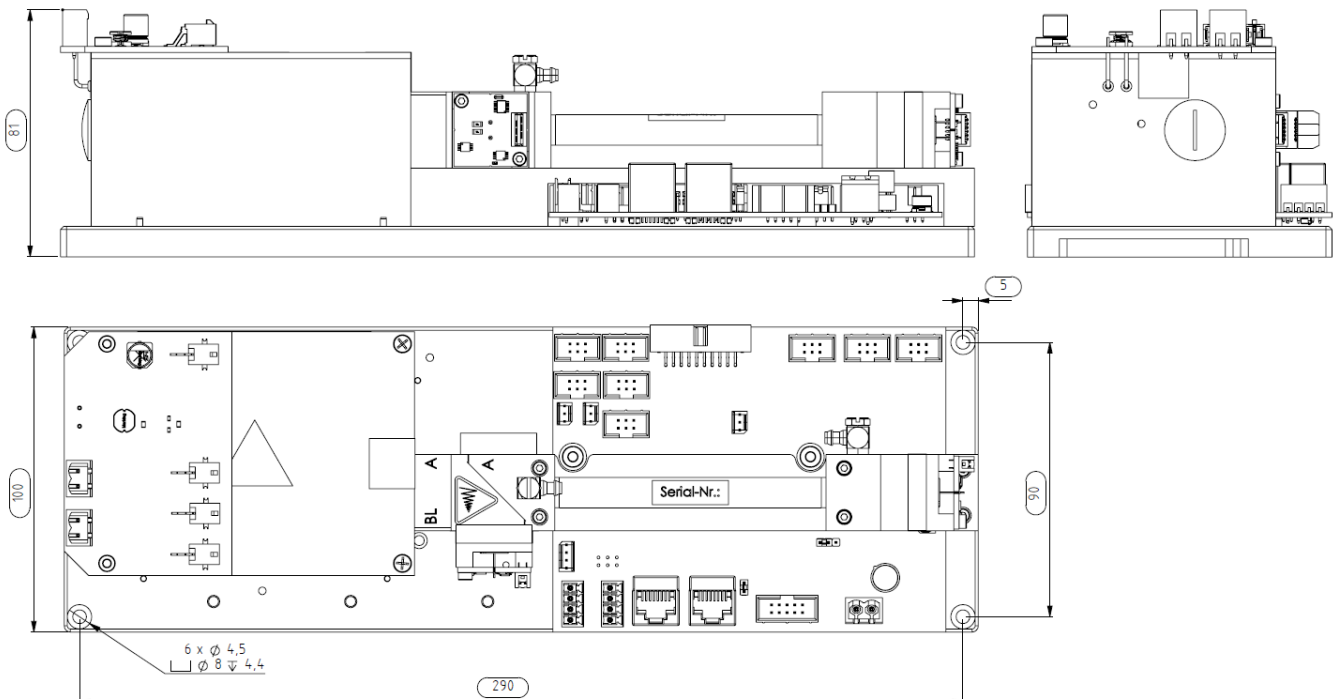
Options

- > O₂.sens (Oxygen sensor)
- > P.sens (Pressure sensor)
- > Analogboard (0-10V)
- > Thermobox

Features & Benefits

- > High dynamic range
- > fast response time
- > applicable for continuous measurements
- > different Interfaces (RS232, CANbus)

Dimensions



For more and most recent information please have a look on our website at www.witec-sensorik.de/en/

ULTRA.sens® H₂S-AK100

		H ₂ S					
		gas channel 1*	gas channel 2*	gas channel 3*	gas channel 4*	Option**	
Single Gas Module				H ₂ S		O ₂	P
		H ₂ S		SO ₂		O ₂	P
Dual*** Gas Module		CH ₄		H ₂ S			

* one gas per column selectable

** P = pressure sensor

*** possibility to add an additional UV or IR channel on request

List of measurement ranges

Measurement range*	O ₃	Cl ₂	H ₂ S	SO ₂	NO ₂	NO
100Vol.%						
50Vol.%						
30Vol.%						
20Vol.%						
10Vol.%						
5Vol.%						
1Vol.%						
5000ppm			✓			
2000ppm			✓			
1000ppm			✓			
500ppm			✓			
300ppm			✓			
100ppm			✓			
50ppm						
10ppm						

* Full scale value (F.S.)

For other measuring ranges please refer to our further datasheets



THE GAS MEASUREMENT COMPANY

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ULTRA.sens[®] H₂S-AK100

H₂S

General features

Measurement principle	Non-dispersive ultraviolet (NDUV); dual beam
Measurement range	see list of measurement ranges
Gas flow	0.1 – 1.5 l/min
Dimensions	300mm x 100mm x 81mm
Weight	approx. 1670g
Tube connector	4/6mm tube
Lifetime of UV radiation source	> 8 000h ¹

Measuring response²

Warm-up time	1 min (initial), <15 min ³
Response time(t ₉₀)	1.5s – 15s ⁴
Detection limit (3·σ)	< 1ppm ⁵
Linearity error	< ± 1% F.S.
Repeatability	± 0.5% F.S.
Long term stability (zero)	< ± 1% F.S./24h
Long term stability (span)	< ± 1% F.S./month
Temp. Influence zero	< 1% F.S./10K
Temp. Influence span	< 2% F.S./10K ⁶
Cross sensitivity	< 2% F.S. ⁷
Pressure influence	< 1.5%/10hPa of reading ⁸

Electrical inputs and outputs

Supply voltage	24 (15 – 30) VDC
Supply current (peak)	< 0.4A
Average power consumption	< 7.5W
Digital output signal	RS 232 (ASCII) or CAN bus

Climatic conditions

Operating temperature	5 – 45 °C ⁹
Storage temperature	-20 – 60 °C
Air pressure	800 – 1200 hPa (mbar)
Ambient humidity	0 – 95% rel. humidity (not condensing)

F.S. full scale ¹ EDL: 50% intensity drop ² related to P_a = 1020hPa ; T_a = 25°C ; flow = 1l/min ³ full specification, demands to environmental conditions
⁴ depends on digital filter settings ⁵ at zero point ⁶ with span temperature compensation ⁷ to each calibrated gas channel, other gases on request
⁸ without pressure compensation ⁹ stable climatic conditions recommended, please check dewpoint considerations



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Subject to change without notice. // 2021-07 Rev.04